

# Abstract Page

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

CORRECTED VERSION

22 APR 2005

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
13 May 2004 (13.05.2004)

PCT

(10) International Publication Number  
WO 2004/039286 A2

(51) International Patent Classification<sup>7</sup>: A61F

(21) International Application Number: PCT/US2003/034129

(22) International Filing Date: 28 October 2003 (28.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 10/281,638 28 October 2002 (28.10.2002) US

(71) Applicant (for all designated States except US): SHERWOOD SERVICES AG [CH/CH]; P.O. Box 1571, Bahnhofstrasse 29, CH-8201 Schaffhausen (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SHIA, Benedict [US/US]; 5 Concannon Circle, Needham, MA 02494 (US). BAILEY, James, Christopher [US/US]; 304 W. South College Street, Yellow Springs, OH 45387 (US). SWISHER, Rork [US/US]; 372 Clarendon Lane, St. Charles, MO 63301 (US). HANLON, James [US/US]; 825 Killiney Drive, Manchester, MO 63021 (US). FOURNIE, Glenn [US/US]; 5221 White Oak Drive, Smithton, IL 62285 (US). COON, Robert [—/US]; 3811-D West School Street, Chicago, IL 60187 (US). PROKOP, Gary [—/US]; 830 Pick Street, Wheaton, IL 60187 (US). HAND, James [—/US]; 546 Taylor Avenue,

(74) Agents: LEONARDO, Mark, S. et al.; Brown Rudnick Berlack Israels LLP, One Financial Center, Boston, MA 02111 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

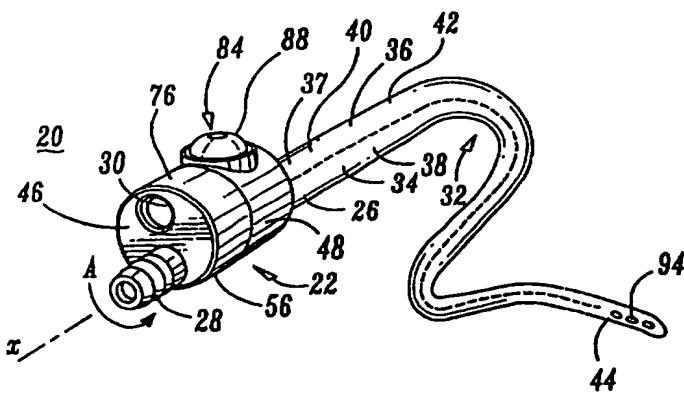
— without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version:

22 July 2004

[Continued on next page]

(54) Title: AUTOMATIC VALVE



WO 2004/039286 A2

the second port while maintaining continuous sealed fluid communication between the second opening and the first passageway adjacent to the second end of the housing. The valve member can be disposed within the housing for rotation relative thereto.

(57) Abstract: A valve system is provided having a housing including a first end, a second end and a first passageway. The housing has a first port and a second port. A valve member is disposed within the housing and movable relative thereto. The valve member defines a portion of the first passageway that includes a first opening configured for alignment and sealed fluid communication with the first port and the second port. The portion of the first passageway further includes a second opening having a greater relative dimension than the first opening. The valve member is manipulable to establish sealed fluid communication between the first opening and the first port or the second opening and the first passageway.